

REMARKS

Claims 1-22, 24-39 and 43-46 are pending for examination with claims 1, 16, 27, 34, 37, 43 and 45 being independent claims. No new matter has been added.

Request for Interview

The undersigned wishes to request an Examiner teleconference interview before further examination of the present application. Applicant respectfully submits a PTOL-413A Applicant Initiated Interview Request Form requesting an interview with Examiner Ryan Yang and his Supervisor Michael Razavi on January 26, 2005 at 11 AM EST.

Rejections under 35 U.S.C. § 103

Claims 1, 3-7, 9, 16-17, 19, 27-28, 30, 34-35, 43, and 45 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,616,079 to Iwase et al. [hereinafter Iwase]. Applicant respectfully traverses the rejection as follows.

Independent Claim 1

Initially, Applicant has amended claim 1 to include some of the features of claim 2, and has canceled claim 2. Claim 1 as amended recites, *inter alia*, plural tile data structures representing plural respective views of the image texture displayed together on a display screen immediately adjacent each other, at least one of the plural respective views of the image texture being based upon an oblique-parallel projection of the image texture. Applicant agrees with the Examiner's assertion, in his rejections of claims 2 and 37, that Iwase does not teach or suggest employing an oblique-parallel projection of the image texture. However, U.S. Patent No. 6,049,337 to Van Overveld [hereinafter Van Overveld] does not cure this deficiency in Iwase. Rather, the Examiner implies that Van Overveld discloses a 'projection', but Applicant is unable to find any reference to an oblique-parallel projection as recited in amended claim 1. Mere suggestion of a projection does not teach or suggest basing an image texture on an oblique-parallel projection.

It seems that the Examiner is relying on common knowledge to reject the claims directed toward image textures based upon an oblique-parallel projection. Since reliance upon facts that are purportedly common knowledge or "well-known" should not

comprise the principle evidence upon which rejection is based, Applicant respectfully requests the Examiner to cite a reference in support of his position as required in M.P.E.P. § 2144.03 or if the Examiner is relying upon facts within his personal knowledge, to file an affidavit establishing those facts pursuant to § 2144.03. Since the motivation for modifying the Iwase image to employ an oblique-parallel projection is without foundation in the prior art of record, the rejection of claim 1 as amended is improper.

Thus, claim 1 patentably distinguishes over Iwase such that the rejection under § 103 should be withdrawn.

Claims 2-7 and 9 depend from claim 1, and for at least the foregoing reasons are also patentable over Iwase.

Independent Claim 16

Iwase does not teach or suggest the features of claim 16 including, *inter alia*, identifying plural adjacent regions of the image surface to which regions the texture map is to be applied, determining a user viewing angle for each of the plural regions, and correlating each viewing angle with a texture tile corresponding to the viewing angle. Iwase does not teach or suggest determining a user viewing angle for each of the plural regions. The Office Action characterizes Iwase as disclosing a plurality of texture tiles which represent plural respective views of the image texture displayed together on a display screen by referencing the object L1, L2, L3 and L4 of Figure 9 and col. 12, lines 1-2. These objects are rotated and repositioned with respect to each other based upon the image to be portrayed, e.g., a mountain in Fig. 9. However, each of these objects are stored and rendered relative to a constant user viewpoint. More particularly, although the objects L1 and L4 are rotated relative to each other in Fig. 9, Iwase determines a single line-of-sight for each display frame. Thus, each object within Fig. 9 of Iwase is rendered with respect to a constant line of sight. Accordingly, claim 16 is not rendered obvious by Iwase and the rejection under § 103 should be withdrawn.

Claims 17 and 19 depend from claim 16 and are patentable for at least the foregoing reasons.

Independent Claim 27

Iwase does not teach or suggest the features of claim 27, as amended, including a method of generating a tile data structure representing an image texture for a tiled texture mapping comprising, *inter alia*, determining plural selected viewing angles for viewing together plural adjacent tiles of the image texture. As noted above with respect to claim 16, Iwase merely determines a single line-of-sight angle for all objects within a particular display frame. Thus, Iwase does not teach or suggest determining plural viewing angles for viewing together adjacent tiles of the image texture. Thus, claim 27 patentably distinguishes over Iwase such that the rejection under § 103 should be withdrawn.

Claims 28 and 30 depend from independent claim 27 and are also patentable for at least the foregoing reasons.

Independent Claim 34

Claim 34 recites, *inter alia*, software instructions for applying a texture map to an image surface in a graphics image comprising software instructions for displaying together the texture map tile at the region on the computer display screen and determining a viewing angle for each of the plural regions. As discussed above with respect to claim 16, Iwase merely determines a single line-of-sight for all objects within a particular display frame, and as such, does not teach or suggest determining a viewing angle for each of the plural regions as recited in claim 34. Accordingly, Applicant respectfully requests that the rejection of claim 34 under § 103 be withdrawn.

Claim 35 depends from independent claim 34, and is patentable for at least the foregoing reasons.

Independent Claim 43

Claim 43 recites, *inter alia*, identifying an array of regions of the image surface to which the texture map is to be applied, determining a projection viewing angle for each region of the array, and displaying a selected texture map tile at each region on the computer display screen, the selected texture map tile corresponding to the determined projection viewing angle for the region. As discussed above with respect to claim 16, Iwase merely determines a single line-of-sight for all objects within a particular display frame, and as such, does not teach or suggest determining a projection viewing angle for

each region of the array as recited in claim 43. Accordingly, Applicant respectfully requests that the rejection of claim 43 under § 103 be withdrawn.

Claims 44 and 45 depend from independent claim 43, and are patentable for at least the foregoing reasons.

Independent Claim 45

Claim 45 recites, *inter alia*, an array of plural tile data structures for displaying on a display screen, the plural data structures comprising a first tile data structure representing a first projection view of the image texture based upon a first viewing angle and a second tile data structure representing a second projection view of the image texture based upon a second viewing angle, the first viewing angle being different from the second viewing angle. As discussed above with respect to claim 16, Iwase merely determines a single line-of-sight for all objects within a particular display frame, and as such, does not teach or suggest a first and second projection view based upon a first and second viewing angle respectively, where the first viewing angle is different from the second viewing angle as recited in claim 43.

Claim 46 depends from independent claim 45, and is patentable for at least the foregoing reasons.

Rejections under 35 U.S.C. § 103

Claims 2, 8, 10-12, 15, 18, 20-24, 26, 29, 31, 33, 36-37, 39, 44 and 46 stand rejected under 35 U.S.C. § 103 as being unpatentable over Iwase in view of Van Overveld. Applicant respectfully traverses the rejection as follows.

Initially, claim 2 has been canceled and claims 8, 10-12 and 15 depend from independent claim 1, and are patentable for at least the same reasons set forth above. Similarly, claims 18, 20-24, and 26 depend from independent claim 16 and are patentable for at least the same reasons set forth above. Claims 29, 31, and 33 depend from independent claim 27, and claims 36 and 39 depend from independent claim 34, and are patentable for at least the same reasons as set forth above. Claims 44 and 46 depend from independent claims 43 and 45, respectively, and are patentable for at least the same reasons as set forth above.

Independent Claim 37

Independent claim 37, as amended, recites, *inter alia*, software instructions for correlating each viewing angle with a texture map tile corresponding to the viewing angle, each texture map tile being based upon a predetermined tile structure and including an oblique parallel projection of the predetermined tile structure. As noted above with respect to claim 1, Van Overveld does not teach or suggest basing a texture tile map on an oblique parallel projection. Moreover, claim 37 recites software instructions for determining plural adjacent regions in a graphics image surface and determining a viewing angle for each of the plural regions. As noted above with respect to claim 16, Iwase merely determines a single line-of-sight for all objects within a particular display frame, and as such, does not teach or suggest determining a viewing angle for each of the plural regions as recited in claim 37.

Claims 24, and 29 have also been rejected based upon a similar mischaracterization of Van Overveld. Applicant also respectfully traverses these rejections under § 103 and requests the Examiner cite a reference to support this position or file an affidavit asserting facts within his personal knowledge.

Rejections under 35 U.S.C. § 103

Claim 13 stands rejected under 35 U.S.C. § 103 as being unpatentable over Iwase in view of U.S. Patent No. 6,054,999 to Strandberg [hereinafter Strandberg]. Applicant respectfully traverses the rejection as follows.

Claim 13 depends from independent claim 1, and is patentable for at least the same reasons set forth above. Moreover, the cited Figure 2 of Strandberg illustrates different views of a rotated object, these plural views do not illustrate that the outer surface of the object is of the same dimension in each of the plural views as recited in claim 13. Specifically, the far right cells of the top two rows in the array of Figure 2 illustrate the surface of the hat having different dimensions in each cell, and similarly, the shape of the ears and even the nose change as the perspective angle changes. Accordingly, Strandberg does not teach or suggest that the outer surface of the image texture has the same dimension in each of the plural respective views. One example of maintaining the dimension of the outer surface in plural respective views is with an

oblique parallel projection, however, other projection and/or image rendering processes may be suitable.

Rejections under 35 U.S.C. § 103

Claims 14, 25, 32, and 38 stand rejected under 35 U.S.C. § 103 as being unpatentable over Iwase in view of U.S. Patent No. 5,995,119 to Cosatto [hereinafter Cosatto]. Applicant respectfully traverses the rejection as follows.

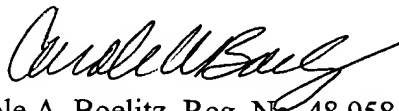
Claims 14, 25, 32, and 38 depend from independent claims 1, 16, 27 and 34 respectively, and are patentable for at least the same reasons set forth above.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any deficiency to **Deposit Account No. 50-0463**.

Respectfully submitted,
Drucker et al., Applicant

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